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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,728	01/19/2005	Jeppe Bastholm	66383-033-7	2568

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EXAMINER

GLASS, ERICK DAVID

ART UNIT	PAPER NUMBER
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2837

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/511,728

Applicant(s)

BASTHOLM, JEPPE

Examiner

Erick Glass

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6 is/are rejected.
- 7) ☐ Claim(s) 3,4 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “said second period of time being shorter in duration than said first period of time” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 7 is objected to because of the following informalities: states, “ a second period of times less than 10 milliseconds”. Appropriate correction is required. The

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specification give the example of coming form 100 Hz, the reciprocal being 10 milliseconds. Not less than 10 milliseconds.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5, and 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Bastholm et al (6,509,705) in view Weimer et al (5,982,156).

With respect to claim 1, 5, and 6, Bastholm et al. discloses a drive unit for an actuator that drives a movable member (including an article of furniture) (col. 1, lines 3-9) comprising a dc motor having a rotor consisting of a plurality of coils connected to a commutator in connection with a set of brushes (col. 1, lines 3-5; inherent that a dc motor has a rotor with coils and a commutator that contacts brushes); a transmission that uses the motor to drive an adjustment means that adjusts an adjustable element (col. 4, lines 62-65); a power supply that supplies power to the drive unit, where the power supply comprises a transformer having a primary side connected to an ac source (col. 1, lines 6-7), and a secondary side having a recitification and smoothing means for connection to the dc motor (col. 1, lines 7-9); the drive unit comprises a first control to compensate for loss in the motor, thereby keeping the motor at a constant speed (cols. 3/4, lines 58-67/1-13; current feedback reduces power loss and keeps motor speed

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constant; and the drive unit also comprises a second control that removes voltage ripple, also keeping the motor at a constant speed (col. 3, lines 35-45; tapping current reduces voltage ripple; reduced power loss means the motor can stay at a constant speed).

Basthom et al. does not disclose the second period of time being shorter in duration than said first period of time.

Weimer et al discloses a control circuit that provides the same control wherein the second period of time being shorter in duration than said first period of time. With respect to figure 2, the first period relating to the inductor and transistor (L and 214) varies according to the voltage, while the second stage relates to the capacitor being shorter in length. It is commonly know in the art that the first period relating to the inductor and transistor of a boost circuit has a longer period than the second period relating to the capacitor.

With respect to claim 2, Bastholm et al. does not disclose the forward and power steps as claimed.

Weimer discloses a converter that uses forward step where the duty cycle is expressed in terms of a constant and the input voltage (cols. 11/12, lines 20-67/1-49; V_{ref} is the constant and V_1 is the input voltage; therefore, arranging equation 4 around gets the relationship; a power step where the output voltage is expressed by the input voltage and the duty cycle (equation 5); and the forward step and the power step result in the output voltage being equal to the constant (equations 6 and 1 allow the output

voltage to equal the constant V_{reg} . The motivation to implement the forward and power steps is to reduce the effects of transients (cols. 3/4, lines 66-67/1-3).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to implement the converter of Weimer et al. into the Bastholm et al. circuit, thereby providing the advantage of reducing transients, as taught by Weimer et al.

Allowable Subject Matter

Claims 3 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With respect to claims 3 and 4, the Prior Art does not disclose the specific relationship between the variables and constant as claimed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erick Glass whose telephone number is 571-272-8395. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on 571-272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EG


LINCOLN DONOVAN
SUPERVISORY PATENT EXAMINER